



June 19, 2017

EX PARTE NOTICE

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Procedures for Commission Review of State Opt-Out Requests from the FirstNet Radio Access Network*, PS Docket No. 16-269

Dear Ms. Dortch:

Rivada Networks, LLC (“Rivada”), pursuant to section 1.1206(b)(2)(iv) of the Commission’s rules,¹ hereby replies to the ex parte notices filed by AT&T, FirstNet, and APCO for presentations made by those entities on June 15, 2017, the date of the Commission’s Sunshine Notice for its June 22, 2017 public meeting, and June 16, 2017.² These ex partes each read provisions into the Public Safety Spectrum Act (“Act”)³ that do not exist in an attempt to constrain the design and operation of state opt-out networks. They also advocate for procedural requirements that unnecessarily intrude into state governmental operations, or, in the case of requesting a final, binding, executed contract before FirstNet’s terms will be final, are impractical because the Commission’s interoperability review is only the first step, not the last, in the opt-out process. Moreover, in its June 16 ex parte, FirstNet asserts a right to add interoperability criteria in its own review, which goes far beyond FirstNet’s statutory authorities and would render meaningless the Commission’s role and that of the statutorily-mandated Technical Advisory Board for First Responder Interoperability (“Technical Advisory Board”). Most tellingly, none of AT&T, FirstNet, or APCO disputes – because they cannot – the technical point of Rivada’s prior ex partes: that a state radio access network (“RAN”) can connect and

¹ See 47 C.F.R. § 1.1206(b)(2)(iv).

² See Letter from Patrick Donovan, Attorney, First Responder Network Authority, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 16-269 (filed June 16, 2017) (“FirstNet June 16 Ex Parte”); Letter from Alex Starr, Assistant Vice President-Senior Legal Counsel, AT&T to Marlene H. Dortch, Secretary, FCC, PS Docket No. 16-269 (filed June 15, 2017) (“AT&T June 15 Ex Parte”); Letter from Patrick Donovan, Attorney, First Responder Network Authority, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 16-269 (filed June 15, 2017) (“FirstNet June 15 Ex Parte”); Letter from Jeffrey S. Cohen, Chief Counsel, APCO International, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 16-269 (filed June 15, 2017) (“APCO June 15 Ex Parte”).

³ See 47 U.S.C. §§ 1401-1443, 1457.

interoperate with FirstNet's core either through a direct connection or indirectly via a state core.⁴ The Act requires that the nationwide public safety broadband network ("NPSBN") be based on a single network architecture and that it evolve as standardized commercial technology evolves. The LTE standards forum 3GPP defined the Evolved Packet Core within the System Architecture Evolution as comprising a number of elements.⁵

As Rivada has previously explained, the recommendations of the statutorily-mandated Technical Advisory Board contained examples of interoperability through indirect interconnection in which some core elements were operated by states, and some were operated by FirstNet.⁶ Rivada agrees with the Technical Advisory Board on indirect connection.

Rivada also agrees with APCO that "achieving a nationwide level of interoperability is the primary objective of the nationwide public safety broadband network," along with ensuring that the network is, from a practical standpoint, usable by local public safety agencies for the vast amount of network activity, which will be local.⁷ Rivada agrees with APCO that FirstNet has the principal responsibility for designing and operating, utilizing commercial standards, the default nationwide, interoperable public safety broadband network that will be built in any state that does not opt-out.⁸ And, although APCO does not explicitly state this, we agree that any state opt-out network must interoperate with the FirstNet network – although states design and operate those opt-out networks. Rivada also agrees with APCO that "the Commission's role is an important one: to provide a specific interoperability assessment of alternative plans in the initial phase of the opt-out process."⁹

APCO, however, incorrectly reads the Public Safety Spectrum Act when it asserts that "FirstNet is solely responsible for establishing the core network."¹⁰ Nowhere does the Act specify that only FirstNet shall operate the one and only core network – or all core network elements – within the nationwide, interoperable public safety broadband network. Had Congress

⁴ See Letter from John T. Nakahata, Counsel to Rivada Networks, LLC, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 16-269, at 3-4 (filed June 15, 2017) ("Rivada June 15 Ex Parte"); Letter from Declan Ganley, Executive Chairman & Co-CEO, and Joseph J. Euteneuer, Co-CEO, Rivada Networks, LLC, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 16-269, at 4-11 (filed June 12, 2017) ("Rivada June 12 Ex Parte").

⁵ See, e.g., Frédéric Firmin, *The Evolved Packet Core*, 3GPP (last visited June 19, 2017), <http://www.3gpp.org/technologies/keywords-acronyms/100-the-evolved-packet-core>.

⁶ See Rivada June 12 Ex Parte at 8 and Appendices 1 and 2. As 3GPP notes, the evolved packet core was designed to enable different networks to interconnect and to enable operators to dimension and adapt their networks easily. Firmin, *supra* note 5.

⁷ APCO June 15 Ex Parte at 1.

⁸ See *id.*

⁹ *Id.*

¹⁰ APCO June 15 Ex Parte at 1-2.

intended to circumscribe network design in such a manner, it would have been easy for it to do so specifically and unequivocally. To be sure, FirstNet must operate a core network in order to operate the nationwide, interoperable public safety broadband network in the non-opt-out states, and opt-out states with or without their own cores will have to interconnect with the FirstNet core and utilize at least some FirstNet core services. But that does not establish any statutory direction – much less a specific and unequivocal direction – that only FirstNet operate all core elements used by public safety.

AT&T and FirstNet both assert that FirstNet has the sole statutory authority to set interoperability requirements through its network policies, and thus they argue that the FCC cannot review FirstNet’s network policies to determine which ones are part of the FCC’s interoperability assessment.¹¹ That argument ignores the express words and structure of the Act, let alone decades of Commission competition policy ensuring interoperability between both existing and new networks.

47 U.S.C. § 1426(c)(1) directs FirstNet to issue a number of different network policies, covering a variety of topics. Notably, these network policies are to be issued “in carrying out the requirement under subsection (b)” and not *in frustration of* the requirements of subsection (b).¹² One of the requirements of subsection (b) is that the FirstNet RFP be “for the purposes of building, operating, and maintaining the network that use, *without materially changing*, the minimum technical requirements developed under section [47 U.S.C. § 1423, i.e., by the Technical Advisory Board and approved by the Commission].”¹³ Some policies, such as the “technical and operation requirements of the network,” and the “practices, procedures, and standards for the management and operation of such network” could affect the interoperability of state networks that must interconnect and interoperate with the FirstNet operated network, but other policies – such as RFP provisions for rural coverage or billing practices – do not.¹⁴ The word “interoperability” itself appears nowhere in 47 U.S.C. § 1426(c)(1), and thus is not an explicit part of FirstNet’s authority to create network policies.

To the contrary, in 47 U.S.C. § 1423, the Act gives the Technical Advisory Board the task of defining interoperability requirements, subject to review and modification by the Commission for “any revisions [the Commission] deems necessary.”¹⁵ In 47 U.S.C. § 1426(b)(1)(B), the Act then precludes FirstNet from issuing an RFP that materially changes these minimum technical requirements. It makes no sense to then interpret the following subsection 47 U.S.C. § 1426(c) to authorize FirstNet to adopt network policies that materially change the minimum technical requirements approved by the Commission.

¹¹ See AT&T June 15 Ex Parte at 2-3; FirstNet Ex Parte at 4-5.

¹² 47 U.S.C. § 1426(c)(3).

¹³ *Id.* § 1426(b)(1)(B) (emphasis added).

¹⁴ *Id.* § 1426(c)(1).

¹⁵ *Id.* § 1423(c).

Turning next to 47 U.S.C. § 1442(e)(3)(C), that provision expressly charges the Commission with determining whether a state plan will meet the minimum interoperability technical requirements previously approved by the Commission under 47 U.S.C. § 1423, and be “interoperab[le] with the nationwide public safety broadband network.”¹⁶ To do this, the Commission must determine which of FirstNet’s network policies, covering a variety of topics, are necessary (not “relevant” or “related”) to interoperability.¹⁷ It is reasonable for the Commission to hold a public comment process to make this determination, consistent with due process requirements. FirstNet’s categorization of which of its policies are necessary to interoperability is helpful and may be persuasive, but is not statutorily required to be binding on the Commission. The Act gave the Commission – acting in its role as an independent expert regulatory agency and traditional regulator of public safety spectrum use – the final word on whether the state’s plan is interoperable with the nationwide public safety broadband network. Thus, contrary to both AT&T’s and FirstNet’s assertions, nothing in the Act precludes the FCC from following proper administrative procedure by receiving comment on FirstNet’s interoperability matrix, and from making an independent assessment as to which will be key determinants of the Commission’s decision as to whether a state plan will be interoperable with the nationwide public safety broadband network. That is especially appropriate because FirstNet filed the first version of its interoperability matrix on June 5, 2017, four days after the Commission announced that it would consider opt-out rules at its June 22, 2017 public meeting and published its Draft Order. FirstNet has now filed a revised interoperability matrix after the start of the Sunshine Act period, leaving interested parties with only a few hours from the time it appeared on ECFS to review the new matrix – a wholly insufficient time to provide any comment on highly technical issues. Both versions of the matrix are opaque, with no guidance as to what inclusion or omission of any element means, or whether it is meant to preclude alternative means of achieving interoperability.

In its June 16 ex parte, FirstNet also asserts a right for NTIA to add further interoperability criteria to its review after the Commission conducts its interoperability review of the state plan – which presumably NTIA would then consider in determining whether to grant a state RAN construction funding and/or spectrum capacity leasing rights under 47 U.S.C. § 1442(e)(3)(C)(iii) and (D).¹⁸ The Act gave no such rights to NTIA and/or FirstNet. As discussed above, the Act designates the Commission to determine whether the state plan will be interoperable with the nationwide, interoperable public safety broadband network. The Act then charges NTIA with reviewing whether the state “has the ability to maintain ongoing

¹⁶ *Id.* § 1443(e)(3)(C)(i)(II).

¹⁷ See Rivada June 15 Ex Parte at 2-3 (explaining the ambiguousness of the term “relevant,” which is better articulated and construed as “necessary”); see also Rivada June 12 Ex Parte at 3-4.

¹⁸ See FirstNet June 16, 2017 Ex Parte at 2 (“While FirstNet is removing these requirements from the scope of the FCC’s review, it is important to note that these requirements are anticipated to be included as part of NTIA’s review and/or in FirstNet’s network policies.”).

interoperability with the nationwide public safety broadband network.”¹⁹ This is not an authorization to undermine the Commission’s interoperability determination or materially change the prior work of the Technical Advisory Board and the Commission to define the Minimum Required Technical Requirements. To the contrary, NTIA’s role is to determine whether the state and its network partner have the capacity to ensure that a state network the FCC has already determined to be interoperable in its initial plan then remains interoperable over the life span of the nationwide public safety broadband network. By the plain language of the Act, this is an assessment of the ability to maintain future interoperability, not of current interoperability. To construe it otherwise would be to eviscerate and rewrite the statutory roles of the Technical Advisory Board and Commission, as their roles in specifying interoperability requirements and conducting the interoperability review could then be entirely superseded by NTIA and/or FirstNet.

From a technical perspective, it is important to note that FirstNet, AT&T, and APCO do not dispute that it is technically possible for a state RAN to connect indirectly to FirstNet’s core and be interoperable with FirstNet’s core. They also do not contest that, under the LTE standards and the Required Minimum Technical Requirements promulgated by the Technical Advisory Board and approved by the Commission, it is possible for states to operate some core elements while relying on FirstNet for others, and thus to interoperate with the nationwide public safety broadband network.

Finally, AT&T, APCO, and FirstNet reiterate arguments for requirements that the Governor personally notify FirstNet of opt-out, or do so in writing, and that the state plan be accompanied by a final, binding, and executed contract. As the Draft Order provides, and as Rivada elaborated in its June 15 ex parte, the FCC should not micromanage the state notification or delegation process.²⁰ It is inconceivable that there will an instance of an unauthorized state opt-out, or that if such an event did occur, that it could not be easily remedied by the state repudiating any unauthorized action. FirstNet has operated now for several years with statutorily-required Single Points of Contact that were designated for each state.²¹ The states no doubt have had time to work out their internal process to ensure that whoever is playing these roles is fully authorized to do so on behalf of the Governor.

Further, as APCO itself recognizes, FCC review is “the initial phase of the opt-out process.”²² As Rivada has previously explained, at that initial stage, it is not reasonable to expect there to be a final, binding, executed contract.²³ Key business terms unrelated to interoperability, but that would need to be memorialized in the final contract, will depend on the terms of FirstNet’s spectrum lease agreement with the state, yet FirstNet has not yet revealed

¹⁹ 47 U.S.C. § 1442(e)(3)(D)(i)(II).

²⁰ See Rivada June 15 Ex Parte at 2.

²¹ See 47 U.S.C. §§ 1426(c)(2)(B), 1442(d).

²² APCO June 15 Ex Parte at 1.

²³ See Rivada June 15 Ex Parte at 2.

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when these terms might be known or even whether they will be fully revealed in advance of a state's opt-out decision. Likewise, the amount of RAN construction grant assistance provided by NTIA to the states remains undisclosed, and NTIA has set no firm timetable for releasing that information. Of course, FirstNet and NTIA could do more to make this more transparent upfront, but they have not done so to date.

Rivada appreciates the hard work and attention to the statutory framework of the Public Safety Spectrum Act reflected in the Draft Order. Congress expressly provided states the right to opt out, preserving an important tenet of our federalism by ensuring that states can be laboratories of innovation, and providing a market-based check on the offers that AT&T, as FirstNet's commercial partner, will make to states. Innovations in the deployment of public safety services in the opt-out states will be a competitive prod to the FirstNet network, to encourage it to evolve, as Congress directed. The Draft Order, with the clarifications Rivada has proposed in its June 12 and June 15 *ex partes*, would help fulfill that part of the Act's overall vision.

Please contact me if you have any questions.

Sincerely,



John T. Nakahata

Counsel to Rivada Networks, LLC

cc: Zenji Nakazawa
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